

ABSTRACT

An acoustic analysis unit acoustically analyzes a first utterance by a user. A pattern by-characteristic selection unit selects a trained pattern optimal for the user's utterance from a plurality of trained patterns that are previously classified and stored every characteristic. A speaker adaptation processor determines a spectral frequency distortion coefficient for correcting difference between spectral frequencies. The difference is caused by vocal tract length of a training speaker and an input speaker. Recognition of subsequent utterances using this determination improves recognition performance of the subsequent speech sounds.